

RQ-11B Raven Small Unmanned Aircraft System (SUAS)

What is it?

In early 2003 there was a need to have a small UAS for use at the small unit level. By the end of 2003, through rapid fielding, a materiel solution was found and delivered to forces initially in Afghanistan and Iraq. This system was the Raven A made by AeroVironment, Inc., Simi Valley, Calif. The Project Manager (PM)-UAS began equipping units in Iraq and Afghanistan with Raven A Stay Behind Equipment / Theater Provided Equipment. In late 2005 PM-UAS and the vendor upgraded the Raven A to the "A+" version and began fielding the 101st Airborne (Air Assault) Division, the 4th Infantry Div. and the 10th Mountain (Light Infantry) Div., each with 60 systems. Starting in late 2006 and continuing until present, PM-UAS began fielding the Raven B.

What has Army Aviation done?

During the summer of 2005, there was a competitive source selection for the Program of Record (POR) SUAS. AeroVironment, Inc., was selected with their upgraded Raven, the B model. A Milestone C decision was approved in October 2005. The Raven B went through Initial Operational Test and Evaluation from May to June 2006 at Fort Bliss, Texas. Full Rate Production decision occurred in October of that same year. The Raven B Basis Of Issue Plan (BOIP) for Army acquisition objective is 2,182 systems. Current procurement objective is 2,079 systems. There are approximately 855 Raven B systems fielded to the Army and National Guard. Raven B is fielded to the Brigade Combat Teams (BCTs) with 15 systems each. In OIF there are 255 systems and 41 Raven B systems supporting OEF. U.S. Special Operations Command (USSOCOM), the U.S. Marine Corps, and U.S. Air Force also employ the Raven B. Army Raven B operators are either trained during unit fielding by the PM-UAS/vendor New Equipment Training Teams (NETT), Fort Benning institutional training, or PM/Fort Benning Mobile Training Team (MTT). Master Trainers are only trained at Fort Benning. USSOCOM also conducts institutional operator training for USSOCOM personnel at Eglin Air Force Base, Fla. and San Clemente Island, Calif. PM-UAS, Fort Benning and USSOCOM all use the current USAACE Program of Instruction (POI) / Training Support Package (TSP). The operator course is 10 training days and the Master Trainer course is five training days. The U.S. Army Aviation Center of Excellence at Fort Rucker and the Maneuver Center of Excellence at Fort Benning are reviewing the feasibility of master trainers' ability to train and certify operators at home station.

What continued efforts does Army Aviation have Planned for the future?

In December 2009, the Raven B was upgraded to Digital Data Link (DDL) replacing its analog command link and video. DDL supports 16 Raven unmanned aircraft (UA) operating simultaneously in the same area that currently supports only four Raven UA. Additional upgrades include digital/ encrypted Full-Motion Video (FMV) and aircraft control, and future interoperability with Unmanned Ground Vehicles (UGV) and Unattended Ground Sensors (UGS). PM-UAS received Intelligence, Surveillance and Reconnaissance (ISR) Surge funding to accelerate DDL development and fielding. Initial Operational Capability (IOC) of the first BCT is 1st Qtr. FY10. The next upgrade to the SUAS is the Rucksack Portable UAS (RPUAS). The Capability Production

Document (CPD) for this system is an increment upgrade with new technology insertion. The RPUAS CPD is in final staffing with Army Capabilities Integration Center enroute to Headquarters Department of the Army staffing.

Why is this important to the Army and Army Aviation?

The Raven SUAS provides battalion and below “over the next hill” and “around the corner” reconnaissance.

As of: 22 Mar 2010